



ABSTRACT

METHOD OF INFORMATION COLLECTION AND PROCESSING OF SAMPLE'S SURFACE

Sv B2
The applied method is implemented in AFM to get space distributions of surface properties and layers, placed on it.

This method includes successive reading in predetermined points of the surface under control of force curve and subsequent constructions of images of appropriate distributions of parameters extracted from these force curves. The peculiarity of the method is that reading of force curve is carried out by noting of values of cantilever's deviation force and/or coordinate of its fixed end and/or derivatives from cantilever's deviation force or coordinate of its fixed end at least in points of control of force curve.

Upon that, characteristics and parameters of sample's surface and/or surface layers, for instance, presence, quantity and thickness of surface layers, coordinates of sample's surface and limits of surface layers, as well as adhesion, elastic and friction properties of surface and layers, are diagnosed by a number of points of control and/or noted values of cantilever's deviation force and/or coordinate of its fixed end and/or derivatives from cantilever's deviation force or coordinate of its fixed end in appropriate points.